



SCSM

SOUTH CAROLINA STATE MUSEUM

# BRING LEARNING TO LIFE

FALL 2019 – SPRING 2020

Teacher Resource Guide

# Programs Chart

Please use this page as a quick resource for our programs.

**ART**  
ART

**R**  
ROBOTICS













**S**  
SCIENCE

**N**  
NATURAL HISTORY

**OR**  
OUTREACH

**A**  
ASTRONOMY

**H**  
HISTORY

Symbol	New	Title	PreK	K	1st	2nd	3rd	4th	5th	6th	7th	8th	HS	OR
<b>S</b>		Small Scientists	X	X	X	X								X
<b>H</b>		State Museum Highlights Tour		X	X	X	X	X	X	X	X	X	X	
<b>R</b>		Bitty Bots		X	X	X								
<b>S</b>		Weathering Weather		X		X								
<b>S</b>		Little Lights			X									X
<b>A</b>		To the Museum...and Beyond!			X									
<b>S</b>		Soccer Bots				X								
<b>S</b>		Matter Matters				X	X		X					X
<b>N</b>		Fossils on Tour					X							
<b>S</b>		Sparkling Potential					X							
<b>S</b>		Welcome to the Circuits					X							
<b>H</b>		A House Divided					X	X				X		
<b>H</b>		Colonial Life					X	X				X		X
<b>ART H</b>		Picturing History					X	X				X		
<b>R</b>		Ballin' Bots					X	X	X					X
<b>H</b>		Cultural History of SC					X	X	X			X		
<b>H</b>		Neither Beaten nor Helpless					X		X			X	X	
<b>ART H</b>		Reflections on the River					X	X	X	X	X	X	X	
<b>S</b>		Now THAT'S Sound Science!						X						
<b>A</b>		Astronomical Differences						X						
<b>A</b>		Planet Scale-Up						X						
<b>S</b>		Stimulating Light						X						
<b>S</b>		Un-Bowl-ievable Bots							X					
<b>S</b>		Transferring Energy								X				
<b>R</b>		OzoCode								X	X			
<b>N</b>		Talking Taxonomy								X			X	X
<b>S</b>		Forming New Bonds									X			X
<b>A</b>		Focal Points										X		
<b>S</b>		Sphero: Physics & Robotics										X		
<b>A</b>		Cosmic Fingerprints										X	X	
<b>H</b>		Virtual Reality: Anne Frank House									X	X	X	
<b>S</b>		Virtual Reality: The Big Table									X	X	X	
<b>S</b>		Virtual Reality: The Body									X	X	X	
<b>N</b>		Virtual Reality: D.A: First Life									X	X	X	
<b>S</b>		Virtual Reality: MEL Chemistry Lab									X	X	X	
<b>S</b>		Virtual Reality: Nuclear									X	X	X	
<b>S</b>		Virtual Reality: Wonderful You									X	X	X	



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**We're here for YOU!**

Should you have any questions, please  
do not hesitate to contact us.

[group\\_visits@scmuseum.org](mailto:group_visits@scmuseum.org)  
803.898.4999

# WELCOME TEACHERS!



**FREE General Admission for SC Students!**

**PLANETARIUM | 4D THEATER | OBSERVATORY**

**Plus all four disciplines:**

**Science & Technology**

**Natural History**

**Cultural History**

**Art**



**NEW  
THIS  
YEAR**

**APOLLO 50**  
JOURNEY TO THE MOON



**VIRTUAL  
REALITY**  
Grades 7 & above

# BlueCross BlueShield of South Carolina PLANETARIUM



**The BlueCross BlueShield of South Carolina Planetarium** offers a unique opportunity for your students to learn the science of astronomy. This 55-foot dome theater features a digital sky system that provides an immersive experience and enables you to see the universe in a whole new way!

**Cost: \$3 per person**

**School groups have access to special 9:30 am and 10:30 am programming in addition to regular show times throughout the day.**

## **WE ARE STARS**

*Recommended for all ages*

SC Academic Standards for Science: 2.P.4; 5.P.5; 7.P.2; 8.E.4, H.C.2, H.E.2, H.E.4, H.B.5, H.P.2

Watch the history of the universe unfold as we explore our explosive origins! Learn how gravity pulled together the first atoms to ignite the first stars, how stars forged the elements of the periodic table, and how increasingly complex molecules led to the formation of our solar system, our planet, and multi-celled organisms.

## **EARTH, MOON, AND SUN**

*Recommended for all ages*

SC Academic Standards for Science: K.E.3, 1.E.3, 4.E.3

Discover how the Earth, the Moon, and the Sun are all related. Peer into the center of the Sun to learn about what it's made of, what makes it shine, and how it affects the diversity of life forms on Earth. Learn why the Moon goes through phases and why eclipses happen. See how Earth's own motion causes celestial objects in the sky to appear to move.

## **TWO SMALL PIECES OF GLASS AND THE MYSTERIOUS MOON**

*Recommended for all ages*

SC Academic Standards for Science: 1.E.3, 4.E.3, 4.P.4, 8.E.4, H.E.1, H.E.2

Two Small Pieces of Glass teaches the history of the telescope and the physical processes by which telescopes collect and focus light to study objects far away in space. This will be followed by a short live program about the Moon, including its phases.

## **BLACK HOLES**

*Recommended for ages 10 and up*

See the laws of physics at their most extreme by coming face-to-face with one of the strangest objects in the universe: a black hole! Learn how black holes form, where they can be found, and what would happen to something that falls in one.



# Boeing OBSERVATORY



*All observing sessions are weather dependent and FREE.*

## **ON-SITE OBSERVATORY PROGRAMS**

How do telescopes work and what can they tell us about the universe? How big is our solar system? How do the sizes of the planets compare with one another? What other tools besides telescopes do scientists use to study space? Find the answers to these questions and more during our astronomy educator-led observatory classes! Safe solar observing is included in all scheduled programs.

## **DISTANCE LEARNING**

Bring the observatory to your classroom! The museum currently offers two FREE distance learning programs. During a distance learning experience, an astronomy educator will guide your class through a hands-on activity, followed by a live view from the telescope. To schedule, e-mail [distancelearning@scmuseum.org](mailto:distancelearning@scmuseum.org) and observatory staff will coordinate a time that works with your schedule.

## **OBSERVATORY OUTREACH**

The SC State Museum offers standards-based astronomy outreach programs for both daytime classroom visits\* and evening events such as a school Family Night or Science Night! We can now send telescopes and trained astronomers directly to your school for FREE! To schedule this experience for your school, e-mail [observatory@scmuseum.org](mailto:observatory@scmuseum.org).

\*Please note that daytime visits are limited to certain SC school districts based on grant objectives; however, evening programs are available to any SC school district.





# The Reverend Dr. Solomon Jackson Jr. 4D THEATER



As the state's only permanent 4D theater, the museum is excited to offer unique experiences to South Carolina students and teachers. Be a part of an immersive environment that both educates and entertains. A giant screen with high definition 3D video and special effects like air blasts, vibrating seats, and water spray draw your students into the action while they learn. Films are between 10 and 15 minutes and are designed to engage all ages.

- Combines 3D film with real-life sensations
- Sense smells; feel wind, rain, and snow; and see lightning
- Only permanent 4D theater in the state

**Cost: \$3 per person: School groups have access to special 10am programming in addition to regular show times throughout the day.**

**Check out [scmuseum.org](http://scmuseum.org) for a complete listing of shows, show descriptions and showtimes**



# STEM & NATURAL HISTORY



**Dates:** Sept. 3 – Dec. 20, 2019; Jan. 6 – April 9, 2020; April 21 – May 29, 2020

**Days:** Tuesdays through Fridays

**Times:** 9:30am, 10:30am, 12pm, and 1pm

**Length:** 45-minutes

**Pre-registration is required. Programs are FREE!**

What could be better than completely FREE education programs during your trip?! The Education Team has updated programs and created new ones to make your trip even more engaging. New this year are Virtual Reality programs reserved for students in 7th grade or higher. See pages 10-25 for subjects broken down by grade level.

## HANDS-ON CLASSROOM LESSONS

Classroom programs are a great way to integrate curriculum during your visit to the SC State Museum! Designed for smaller groups of about 25 students, classroom programs include hands-on exploration and meet grade-level standards. Some of our topics include:

Virtual Reality Biology

Virtual Reality Chemistry

Robotics

Physics

Digital Literacy

Mixing, Measuring

Fossils, Circuits

Energy Transfer

## SCIENCE DISCOVERY THEATER AUDITORIUM STYLE PROGRAMS

Science Discovery Theater programs are standards-based auditorium style programs meant to engage larger audiences of up to 80 participants. These dynamic programs include audience participation, fun-filled demonstrations, and cool experiments! These entertaining classes cover a variety of standards-based topics including:

Light Science

pH Scale

States of Matter

Taxonomy

Chemistry

Electricity





# HISTORY & ART



**Dates:** Sept. 3 – Dec. 19, 2019; Jan. 6 – April 13, 2020; April 21 – May 29, 2020  
**Times:** 9:30am, 10:30am, 12pm, and 1pm  
**Length:** 45 minutes

**Pre-registration is required. Programs are FREE!**

## EDUCATION STATIONS

Guides are stationed at popular exhibits and will engage your class with 5-minute mini-lessons. These are standards-based and self-paced during open exploration time.

## COSTUMED INTERPRETATION

During your exploration of our galleries, don't be surprised to find our guides in costumes from different times in history. Costumed interpreters give students a glimpse of how everyday and extraordinary people of the past lived and worked. Knowledgeable presenters explain the fashions and foibles of the time, sharing stories and secrets of those who came before us.

## STANDARDS-BASED HISTORY AND ART TOURS

(Available September to February: Monday – Friday; March to May: Monday – Wednesday)  
Discover the entire museum on a guided introductory tour or book a Cultural History tour and explore South Carolina's rich stories.

(Available Monday – Thursday)

Picturing History explores how works of art and historical documents can work together to illuminate the past. Reflections on the River: explores the significance of South Carolina rivers in culture, industry, and landscape, as well as the ways in which they have inspired artists in the state. This brand new tour links cultural history and art to the world around us (available until March 2020).

## HISTORY LESSONS

(Available Monday – Thursday)

Take your students back through some of the most tumultuous times of our history with hands-on experiences connected to South Carolina's stories. Available Lessons:

- A House Divided: South Carolina in the Civil War
- 'Neither Beaten nor Helpless': South Carolina and Reconstruction
- Colonial Life

# OUTREACH



*The South Carolina State Museum is on the move bringing fun-filled and engaging learning experiences across the state! Whether you're looking for a program for your classroom, afterschool or special event, outreach programs are designed to bring the fun of the State Museum directly to you. Let's Go LEARN with the South Carolina State Museum!*

**Cost: \$150 for the 1st program**  
**\$100 for each additional program of the same type within the same day**  
**Pre-registration is required.**

For questions or to book your Let's Go LEARN outreach experience, contact [outreach@scmuseum.org](mailto:outreach@scmuseum.org) or 803.898.4990.

## STARLAB PLANETARIUM

Broaden your cosmic horizon from your very own classroom with the Starlab portable planetarium! This experience features an inflatable dome and star projector designed to transport you and your students through the solar system and beyond. Hold on, everyone – we're about to see the Galaxy in a whole new way!

- **SCSM Educator Led Starlab** – During this 45-minute program, SCSM educators take you and your students on a fantastic voyage through the stars covering topics from navigation and the Starfield, constellations, the moon, and the solar system.
- **Rent the Starlab** – Explore the stars and beyond at your own pace. Teachers can use the dome throughout the course of the week to teach astronomy lessons themselves. This rental is \$700 for the week.



## CLASSROOM PROGRAMS

Looking for a smaller group experience? Guaranteed to educate and enthrall, outreach classroom programs incorporate hands-on exploration and discovery and can be adapted to meet a variety of grade-level needs. All programs align with SC Academic Standards.

## ASSEMBLY PROGRAMS

Got a full house? Check out our crowd-pleasing assembly programs. These dynamic sessions include audience participation, fun-filled demonstrations, and some super cool experiments! It's sure to leave your students engaged and excited! All programs align with SC Academic Standards.



SOUTH CAROLINA STATE MUSEUM





# Plan Your Trip

The South Carolina State Museum is the perfect destination for field trips. You can plan your trip in just **three easy steps!**

## Step 1: Research

- Take a look at this Resource Guide or [scmuseum.org](http://scmuseum.org) to learn more about our amazing FREE programming and affordable learning opportunities in the planetarium and 4D Theaters.
- Keep in mind that certain programs are only available on certain days and times.
- Choose three dates with your school team. Take notes and decide on your preferred schedule or preferred list of programs you would like to attend.

## Step 2: Request

- It's time to fill out your Online Reservation Request form! This can be found on the field trips webpage. Field trip booking can be completed via our website.
- Don't forget to include your three preferred dates and make sure the programs you hope to attend are available on those days.
- All programs must be booked at least two weeks in advance of your requested trip.
- Don't forget to contact the Crescent Café if you'd like to have a catered lunch or the Cotton Mill Exchange for pre-made gift bags! See page 2 for more information.

## Step 3: Get Ready

- Team up: Get together with your teachers and chaperones at least a week prior to your trip and go over expectations, schedules, museum manners, and guidelines. Be sure to let chaperones know whether they are included in your school headcount or if they'll need to pay for themselves when they arrive.
- Group Visits staff will divide your school into groups that allow you to get the most out of your visit. Please be sure to print a schedule for everyone on your team and follow the groupings provided for you to ensure that your time with us is a success.
- Check out our amazing online resources! There are grade appropriate Exploration Guides to engage students in the exhibits, Tips for Chaperones, Planetarium and 4D Education Guides, Museum Maps, Bus Maps, and more!

## Pricing Chart

The State Museum offers FREE general admission to South Carolina school students. See below for museum general admission prices for school field trips as well as add-on attraction pricing for the museum's planetarium, 4D theater and blockbuster exhibit. Please note: tours and educator led programs and classes are FREE of charge.

	SC Students & Teachers	SC Chaperones	Out-of-State Visitors
General Admission	<b>FREE</b>	<b>\$5.00</b>	<b>\$5.00</b>
Planetarium	<b>\$3.00</b>	<b>\$3.00</b>	<b>\$3.00</b>
4D Theater Show	<b>\$3.00</b>	<b>\$3.00</b>	<b>\$3.00</b>
Blockbuster Exhibit	<b>\$3.00</b>	<b>\$3.00</b>	<b>\$3.00</b>

# LUNCH



The South Carolina State Museum offers a FREE space where visiting school groups can eat. Schools may order boxed lunches from the Crescent Café or bring their own bagged lunches. Due to contract restrictions, SCSM cannot allow outside catering in our facility.

- Lunch room reservations are required 2-weeks in advance and are granted on a first-come, first-served basis.
- If the lunch room is unavailable, groups may eat outside at Coble Plaza. No reservation required.
- Lunch times begin at 10:30am and run every half hour, with the last lunch scheduled at 1pm. As a courtesy to other groups, it is necessary that all schools adhere to the half-hour time given to them. This includes passing out food and packing up.
- Upon arrival to the museum, a staff member will help offload your organized lunch boxes and coolers and will take them to the lunch room for you. At the end of the day, your lunches will be waiting for you at the front of the building so you can easily put them back on the bus.
- SCSM is not able to refrigerate or heat food.



## Crescent Café

Don't want to worry about lugging around coolers and keeping track of lunch boxes? Pre-order box lunches for children (\$7) and adults (\$11) and have lunches waiting for you, fresh from the museum's Crescent Café! For a menu or to place an order, contact the Crescent Café Catering Manager at [crescentcafe@thesouthernway.com](mailto:crescentcafe@thesouthernway.com) or call 803.898.4937.

Please place your order at least 10 business days prior to your visit. State Museum and Crescent Café invoices are sent, and must be paid separately.



# GIFT SHOP



## Cotton Mill Exchange

Every field trip deserves a great souvenir! Pre-order gift bags for your students from the Cotton Mill Exchange museum store. Gift bags are \$4 per student. Contact 803.898.4967 at least three days prior to your visit.

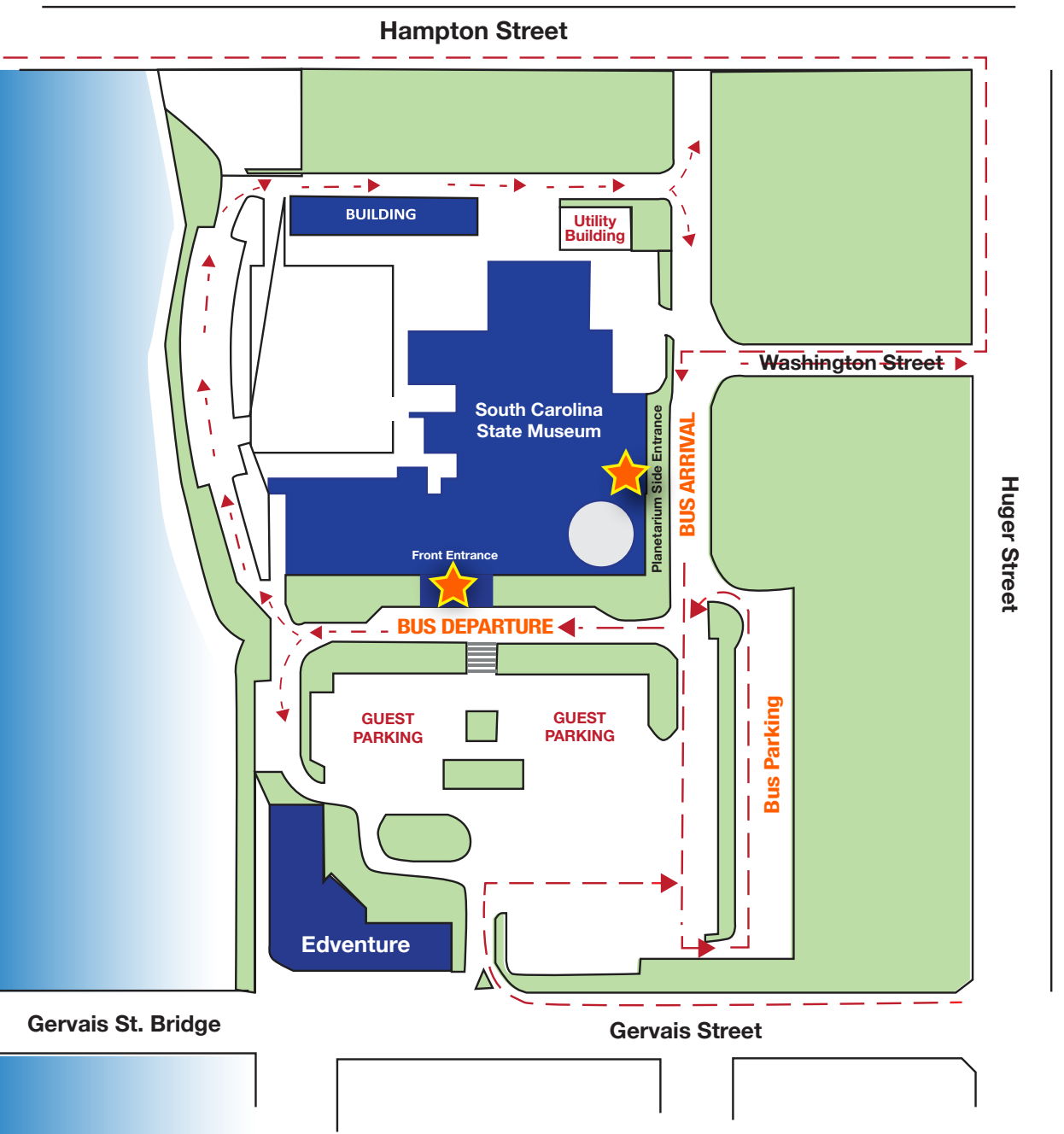
## Accessibility

The State Museum is proud to be a place everyone can explore! Please let us know if you or your students will have any special requirements prior to your visit. The State Museum has many accessibility tools to make your visit a little easier, including:

- Wheelchairs
- Noise Canceling Headphones
- Sensory/Fidget Bags
- Sensory Seat Pads
- Family Restrooms
- Triage/Changing Room
- First Aid Stations
- Assistive Listening Devices for 4D and Planetarium Shows



# Bus Map







## Pre-K – 2nd Grade Programs



## BITTY BOTS

**Grades:** Kindergarten, 1st, 2nd grade focused, available for all

**SC 2017 Computer Science and Digital Literacy Standards:** K.CS.1, K.SC.2, K.SC.3, K.IC.1, K.IC.2; 1.CS.1, 1.CS.2, 1.CS.3, 1.IC.1, 1.IC.2; 2.CS.1, 2.CS.2, 2.CS.3, 2.IC.1, 2.IC.2

**Style:** Classroom

**Maximum Capacity:** 25 participants (10 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

Gear up for learning with robots! Students will learn the inner workings of the world of robotics with the museum's little blue robot friend, Dash! Take a look beyond the lights, wheels, and buttons to see what makes these bots work, and learn how we talk to them. Students will create their own programs and show-off their new skills to the entire class. This lesson has the option of screen-free block coding for non-readers as well.

## LITTLE LIGHTS

**Grades:** 1st grade focused, available for all

**SC 2014 Academic Standards for Science:** 1.S.1, 1.P.2

**Style:** Auditorium

**Maximum Capacity:** 80 participants (15 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

Your students will be lighting up with excitement in this electrifying demonstration! Throughout this program, we will discuss the basic properties of visible light—where it comes from, how it moves, and ways it can be affected. How will moving a light source alter the appearance of a shadow? If light travels in a straight line, how can we make it change direction? We will answer all these questions and more in this “enlightening” lesson!

## MATTER MATTERS

**Grades:** 2nd, 3rd, and 5th grade focused, available for all

**SC 2014 Academic Standards for Science:** 2.S.1, 2.P.3; 3.S.1, 3.P.2; 5.S.1, 5.P.2

**Style:** Auditorium

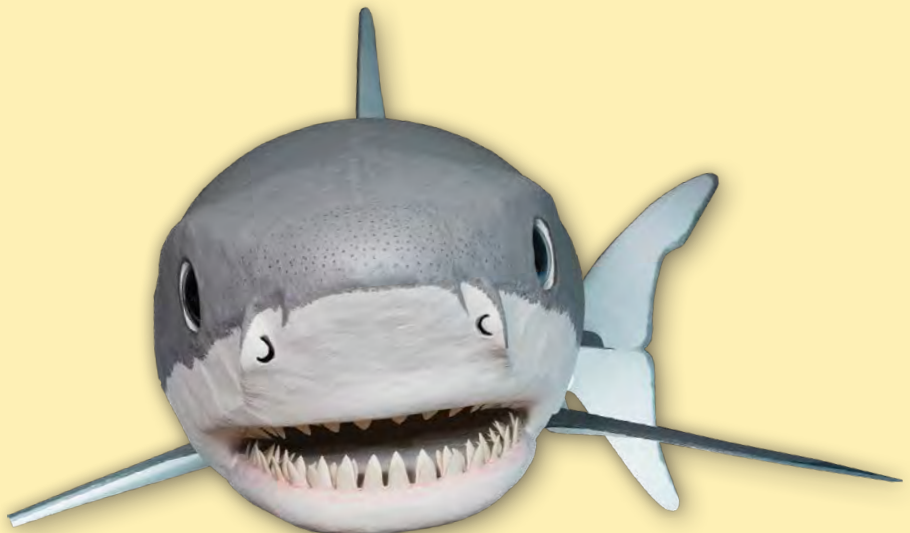
**Maximum Capacity:** 80 participants (15 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

What makes matter break, bond, bubble, or BOOM?! Students will demonstrate their knowledge of the physical properties of matter in this explosive presentation. We will discuss the properties of each major state of matter, the reactions that can make them change, and what happens to the atoms in each one. Students will also be challenged to consider the differences between chemical and physical reactions and learn about a “super cool” phenomenon called sublimation.





**SOCCER BOTS** **NEW****Grades:** 2nd grade focused, available for all**SC 2014 Academic Standards for Science:** 2.S.1, 2.P.4**Style:** Classroom**Maximum Capacity:** 25 students (10 minimum)**Duration:** 30-45 minutes**Days:** Monday - Friday**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

Have you ever wondered if science could be useful in sports? In this program students will discover the physics behind one of the world's favorite sports, soccer. Using the museum's favorite robot Dash, we will take a look at how a soccer ball is moved around by different pushes and see how different textures might affect the friction involved with our ball's motion. Get ready to code your way to a PK, while we look at all the useful physics found in soccer.

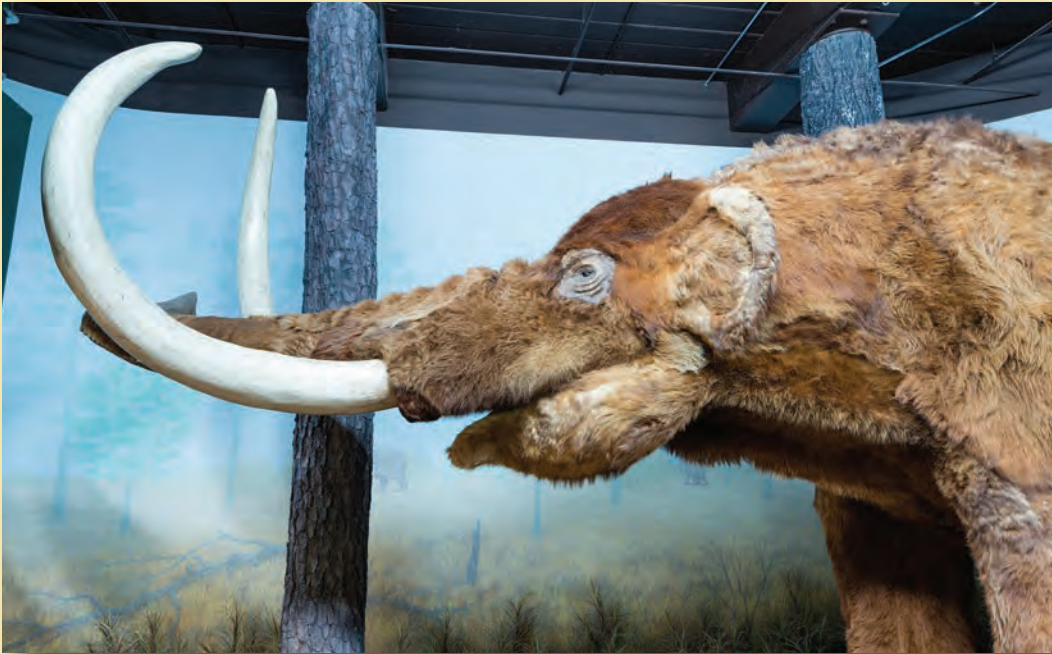
**SMALL SCIENTISTS****Grades:** Kindergarten, 1st, 2nd grade focused, available for all**SC 2014 Academic Standards for Science:** K.S.1, 1.S.1; 2.S.1, 2.P.3**Style:** Classroom**Maximum Capacity:** 25 students (10 minimum)**Duration:** 30-45 minutes**Days:** Monday - Friday**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

Get your small scientists ready to tackle big ideas in the South Carolina State Museum's interactive laboratory! Here, your students will explore how to safely use different scientific instruments, practice proper measuring techniques with fraction cups, and learn about color mixing with kid-friendly test tubes. At the end, your students will put their knowledge to the test to create their very own chemical reactions and make mini-volcanoes!

**STATE MUSEUM HIGHLIGHTS TOUR****Grades:** All grades**Style:** Tour**Maximum Capacity:** 100 participants (10 minimum)**Duration:** 45 minutes**Days:** Sept.-Feb.: Monday through Friday; March-May: Monday through Wednesday**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

This tour is a great introduction to the State Museum and highlights some of our most intriguing exhibits. Docents guide students through museum galleries presenting South Carolina's natural history, cultural history, science, technology and art. Schools will be asked to break students into small groups of 10.





## TO THE MUSEUM... AND BEYOND!

**Grades:** 1st grade only

**SC 2014 Academic Standards for Science:** 1.S.1, 1.E.3

**Style:** Boeing Observatory Classroom

**Maximum Capacity:** 50 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Tuesdays and Thursdays Only

**Times:** 9:30 am, 10:30 am and 1 pm

What's the difference between the Earth, Moon, and Sun? What are the reasons for the seasons? Why are telescopes so important, and how do they work? These are just a few questions students will explore during this two-part observatory program. Safe solar observing (weather permitting) using the Boeing Observatory's special solar telescope is included in this unique, one-of-a-kind experience.

## WEATHERING WEATHER

**Grades:** K-2 grade focused, available for all

**SC 2014 Academic Standards for Science:** K.E.3; 2.E.2

**Style:** Auditorium

**Maximum Capacity:** 80 participants (15 minimum)

**Duration:** 45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

Have you ever wondered about weather? Pondered about precipitation? Get ready to be clever about climate! Join us as we discover how weather affects the environment, experiment with making clouds in a bottle, and even help us get our baby sharks dressed for the seasons. At the museum, you're the meteorologist and you'll get the chance to report on the weather!



## 3rd – 5th Grade Programs





## A HOUSE DIVIDED: SOUTH CAROLINA IN THE CIVIL WAR

**Grades:** 3rd, 4th, and 8th grades only

**SC Academic Standards for Social Studies:** 3.4; 4.6; 8.4

**Style:** Classroom

**Maximum Capacity:** 30 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Mondays and Wednesdays Only

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

Discover what life was like—and how it changed—during the Civil War. From the Ordinance of Secession to the firing on Fort Sumter to the Union blockade of Charleston, South Carolina played a pivotal role in the War Between the States. Students will outfit a soldier for battle, address situations on the home front, and face the terror of the burning of Columbia in this lesson. Schools may be split into groups of 15.

## ASTRONOMICAL DIFFERENCES

**Grades:** 4th grade only

**SC 2014 Academic Standards for Science:** 4.S.1, 4.E.3, 4.P.4

**SC 2014 Academic Standards for Math:** 4.1

**Style:** Boeing Observatory Classroom

**Maximum Capacity:** 50 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Tuesdays and Thursdays Only

**Times:** 9:30 am, 10:30 am and 1 pm

In this two-part program, students will create a scale model of the Earth-Moon system and explore basic math concepts to calculate the distance between the Earth and the Moon. We'll also figure out how long it takes to travel to the Moon at various speeds, and compare the Earth's size to that of Jupiter and the Sun. Safe solar observing (weather permitting) using the Boeing Observatory's special solar telescope is included in this experience.

## BALLIN' BOTS

**Grades:** 3rd, 4th, and 5th grade focused, available for all

**SC 2017 Computer Science and Digital Literacy Standards:** 3.AP.1, 3.AP.2, 3.AP.3, 3.AP.4; 3.IC.1, 3.IC.2; 4.AP.1, 4.AP.2, 4.IC.1, 4.IC.2; 5.AP.1, 5.AP.2, 5.IC.1, 5.IC.2

**Style:** Classroom

**Maximum Capacity:** 25 students (10 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

We're playing basketball...with robots! Students will learn all about the past, present, and future of robotics in this playful program. Using our little blue robot named Dash, and some encoding help from students, we'll learn that robots can be programmed to do all sorts of things, even shoot a free throw!

## COLONIAL LIFE

**Grades:** 3rd, 4th, and 8th grades only

**SC Academic Standards for Social Studies:** 3.2; 4.3; 8.1

**Style:** Combination tour and classroom program

**Maximum Capacity:** 30 students (10 minimum)

**Duration:** 45 minutes

**Days:** Mondays and Wednesdays Only

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

Journey back in time to learn how South Carolina went from a fledgling British colony into a full-fledged fight for liberty. In this lesson, we'll visit Native American societies and trek with the earliest European settlers. With hands-on engagement and exploration in the galleries, students encounter the turbulent times of our founding families and ideas that have shaped the American character. Schools may be split into groups of 15.

# 3rd - 5th Grade Programs





## CULTURAL HISTORY OF SOUTH CAROLINA

**Grades:** 3rd, 4th, 5th and 8th grades only

**SC Academic Standards for Social Studies:** 3.1, 3.2, 3.3, 3.4, 3.6; 4.1, 4.2, 4.3, 4.6; 5.1, 5.3; 8.1, 8.3, 8.4

**Style:** Tour

**Maximum Capacity:** 60 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Sept.-Feb.: Monday - Friday; March-May: Monday - Wednesday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

Museum docents guide students on a standards-based tour of South Carolina's cultural history. Covering a variety of topics such as Native American life, European exploration, the American Revolution, Antebellum period, the Civil War, and early 20th century life, this program asks students to think about life through the ages and how it has shaped South Carolina today. Schools will be asked to break into groups of 10.

## FOSSILS ON TOUR

**Grades:** 3rd grade focused, available for all

**SC 2014 Academic Standards for Science:** 3.L.5

**Style:** Combination tour and classroom program

**Maximum Capacity:** 25 participants (10 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Fridays

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

Get the best of both worlds with a tour of our Natural History floor and a hands-on classroom activity to learn all about fossils! We'll start out with Finn the Megalodon in the Natural History exhibits to learn how fossils are formed and discovered. Next, we'll explore the habitats of South Carolina and compare ourselves to Ice Age giants to see what fossils can tell us about the history of the Earth. Finally, we'll head to our classrooms and get hands-on with more than 15 genuine fossils.

## INCREDI-BOWL ROBOTS **NEW**

**Grades:** 5th grade focused, available for all

**SC 2014 Academic Standards for Science:** 5.S.1, 5.P.5

**Style:** Classroom

**Maximum Capacity:** 25 participants (10 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 a.m., 10:30 a.m., 12 p.m., and 1 p.m.

Ever seen a robot try to bowl? Now you can! In this hands-on physics program, we will use our little blue robot named Dash to learn the ins and outs of position, direction, and speed as we try to knock over all the pins in our own bowling alley. Which forces are helping us, and which ones are hurting us? Will the mass of our bowling ball help or hurt? Let's find out together as we go bowling for science.

## MATTER MATTERS

**Grades:** 2nd, 3rd, and 5th grade focused, available for all

**SC 2014 Academic Standards for Science:** 2.S.1, 2.P.3; 3.S.1, 3.P.2; 5.S.1, 5.P.2

**Style:** Auditorium

**Maximum Capacity:** 80 participants (15 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

What makes matter break, bond, bubble, or BOOM!? Students will demonstrate their knowledge of the physical properties of matter in this explosive presentation. We will discuss the properties of each major state of matter, the reactions that can make them change, and what happens to the molecules in each one. Students will also think about the differences between chemical and physical reactions and learn about a "super cool" phenomenon called sublimation.









## NEITHER BEATEN NOR HELPLESS: SOUTH CAROLINA AND RECONSTRUCTION

**Grades:** 3rd, 5th, 8th, and High School only

**SC Academic Standards for Social Studies:** 3.4, 5.1, 8.5, USHC-3

**Style:** Classroom

**Maximum Capacity:** 30 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Mondays - Thursday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

In this lesson, we will explore the Museum's Reconstruction exhibit, focusing on the meaning of American citizenship as it was shaped after the Civil War. Students will discuss the 13th, 14th, and 15th amendments and analyze media coverage from the time, including the work of both sketch artists and photographers. Join us as we discover how moments from our past inform not only our present, but our future, as well. Schools may be split into groups of 15.

## NOW THAT'S SOUND SCIENCE! **NEW**

**Grades:** 4th grade focused, available for all

**SC Academic Standards for Social Studies:** 4.P.4B

**Style:** Auditorium

**Maximum Capacity:** 80 participants (15 minimum)

**Duration:** 45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

This program all about sound is back by popular demand! Students will learn about specific properties, such as pitch and volume, and learn all about how sound is a form of energy. We'll test different materials to see how well sound can travel and take a look at different forms of communication. Noises – Vibrations – Matter – now that's what we call Sound Science!

## PICTURING HISTORY

**Grades:** 3rd, 4th, and 8th grades only

**SC Academic Standards for Social Studies:** 3.2, 3.3, 3.4, 3.5; 4.2, 4.3, 4.6; 8.1, 8.2, 8.3, 8.4

**SC Academic Standards for Visual Arts:** 3.4, 3.5; 4.4, 4.5; 8.4, 8.5

**Style:** Tour

**Maximum Capacity:** 30 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Mondays - Thursday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

"Art imitates life imitates art." In this tour, experience first-hand how artists through the ages have held a mirror up to their world and created works that not only enchant the eye, but can tell us much about their lives and our own history. Students will see South Carolina from a more creative point of view and learn how art pieces serve as historic documents. Schools may be split into groups of 15.

## PLANET SCALE-UP

**Grades:** 4th grade only

**SC 2014 Academic Standards for Science:** 4.S.1, 4.E.3

**Style:** Boeing Observatory Classroom

**Maximum Capacity:** 50 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Tuesdays and Thursdays Only

**Times:** 9:30 am, 10:30 am and 1 pm

In this two-part program, students will discover the relative sizes of the planets by building a simple model using play dough. They will see how big the gas giant planets are compared to the Earth, how much smaller Mercury is compared to Jupiter, and gain insights as to why Pluto is no longer considered a planet. Along the way, students will practice following directions and build motor skills. Safe solar observing (weather permitting) using the Boeing Observatory's special solar telescope is included in this experience.

## REFLECTIONS ON THE RIVER **NEW**

**Grades:** 3rd, 4th, and 8th grades only

**SC 2014 Academic Standards for Science:** 3.4, 3.6, 4.4, 4.6, 5.4, 5.6, 6.4, 6.6, 7.4, 7.6, 8.4, 8.6, HS 4, HS 6

**SC Academic Standards for Visual Arts:** 3.1, 3.5, 4.1, 5.3, 8.1, 8.5, USHC-4

**Style:** Tour

**Maximum Capacity:** 30 students (10 minimum)

**Duration:** 45 minutes

**Days:** Mondays - Thursday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

This tour explores works in the Lipscomb Gallery and the significance of South Carolina rivers in culture, industry, and landscape, as well as the ways in which they have inspired artists in the state. A brand new program, it links cultural history and art to the world around us (available until March 2020).

## SPARKING POTENTIAL

**Grades:** 3rd grade focused, available for all

**SC 2014 Academic Standards for Science:** 3.S.1, 3.P.3

**Style:** Auditorium

**Maximum Capacity:** 80 students (15 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

This presentation will have your students buzzing when we shock their locks with these electrifying experiments! From protons, neutrons, and electrons to the very basics of circuits, your students will put their current knowledge to good use as we discuss different forms of electricity and the potential that resides within all of us! We'll also discuss where we see electricity in the real world and the importance of conductors and insulators in our daily lives. Make like an electron and get excited!

## STATE MUSEUM HIGHLIGHTS TOUR

**Grades:** All grades

**Style:** Tour

**Maximum Capacity:** 100 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Sept.-Feb.: Monday - Friday; March-May: Monday - Wednesday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

This tour is a great introduction to the State Museum and highlights some of our most intriguing exhibits. Docents guide students through museum galleries presenting South Carolina's natural history, cultural history, science, technology and art. Schools will be asked to break students into small groups of 10.

## STIMULATING LIGHT

**Grades:** 4th grade focused, available for all

**SC 2014 Academic Standards for Science:** 4.S.1, 4.P.4

**Style:** Auditorium

**Maximum Capacity:** 80 students (15 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

See your students' faces light up as they learn about the power and properties of light! In this program, your students will learn what light is and how we use it to see. They will investigate across the visual light spectrum and beyond to see what wavelength has to do with color and experiment with the way light can bend and bounce. Your students will have a ball (and maybe throw a few) as they fire off ideas about how light might or might not pass through certain objects in this fun, enlightening presentation!



## WELCOME TO THE CIRCUITS

**Grades:** 3rd grade focused, available for all

**SC 2014 Academic Standards for Science:** 3.S.1, 3.P.3

**Style:** Classroom

**Maximum Capacity:** 25 participants (10 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

Come one, come all, and welcome to the circu(it)s! In this experiential learning program, your students will explore how electricity is transferred and transformed into sound and light energy with "squishy circuits," a conductive and moldable dough. We'll incorporate different items into these circuits to find out which materials like to conduct or insulate electricity. Finally, we'll spark your students' curiosity about what else they can do with circuitry with a Cubelet robot challenge. *Circus peanuts not included.*







## Middle School Programs



## A HOUSE DIVIDED: SOUTH CAROLINA IN THE CIVIL WAR

**Grades:** 3rd, 4th, and 8th grades only

**SC Academic Standards for Social Studies:** 3.4; 4.6; 8.4

**Style:** Classroom

**Maximum Capacity:** 30 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Monday - Thursday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

Discover what life was like – and how it changed – during the Civil War. From the Ordinance of Secession to the firing on Fort Sumter to the Union blockade of Charleston, South Carolina played a pivotal role in the War Between the States. Students will outfit a soldier for battle, address situations on the home front, and face the terror of the burning of Columbia in this lesson. Schools may be split into groups of 15.

## COLONIAL LIFE

**Grades:** 3rd, 4th, and 8th grades only

**SC Academic Standards for Social Studies:** 3.2; 4.2; 8.1

**Style:** Classroom

**Maximum Capacity:** 30 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Monday - Thursday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

Journey back in time and learn how South Carolina went from a fledgling British colony into a full-fledged fight for liberty. In this lesson, we'll visit the earliest European settlers – and hear both sides of the argument for America's independence. With hands-on experience and exploration in the galleries, students encounter the turbulent times of our founding families, and the ideas that have shaped the American character. Schools may be split into groups of 15.

## COSMIC FINGERPRINTS

**Grades:** 8th grade and high school only

**SC 2014 Academic Standards for Science:** 8.S.1, 8.P.3, 8.E.4, H.E.1, H.E.2

**Style:** Boeing Observatory Classroom

**Maximum Capacity:** 50 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Tuesdays and Thursdays Only

**Times:** 9:30 am, 10:30 am and 1 pm

How do astronomers know what stars and galaxies are made of? In this two-part program, students will learn how astronomers unlock the mysteries of the universe using the field of spectroscopy – the splitting of light from celestial objects into its component colors. Safe solar observing (weather permitting) in the museum's Boeing Observatory is included in this experience.

## CULTURAL HISTORY OF SOUTH CAROLINA

**Grades:** 3rd, 4th, 5th, and 8th grades only

**SC Academic Standards for Social Studies:** 3.1, 3.2, 3.3, 3.4, 3.6; 4.1, 4.2, 4.3, 4.6; 5.1, 5.3; 8.1, 8.3, 8.4

**Style:** Tour

**Maximum Capacity:** 60 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Sept.-Feb.: Monday - Friday; March-May: Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

Museum docents guide students on a standards-based tour of South Carolina's cultural history. Covering a variety of topics such as Native American life, European exploration, the American Revolution, Antebellum period, the Civil War, and early 20th century life, this program asks students to think about life through the ages and how it has shaped South Carolina today. Schools will be asked to break into groups of 10.



## FOCAL POINTS

**Grades:** 8th grade only

**SC 2014 Academic Standards for Science:** 8.S.1, 8.E.4

**SC 2014 Academic Standards for Math:** 8-5

**Style:** Boeing Observatory Classroom

**Maximum Capacity:** 50 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Tuesdays and Thursdays Only

**Times:** 9:30 am, 10:30 am and 1 pm

This two-part program incorporates the museum's observatory classroom and the 1926 Alvan Clark 12 3/8-inch refracting telescope. In this engaging class, students will experiment with lenses and apply key concepts of optics such as focal length and focal point. In the process, students will gain experience in making measurements with rulers and using the metric system. Safe solar viewing (weather permitting) using the Boeing Observatory's special solar telescope is included in this experience.

## FORMING NEW BONDS

**Grades:** 7th grade focused, available for all

**SC 2014 Academic Standards for Science:** 7.P.2

**Style:** Auditorium

**Maximum Capacity:** 80 participants (15 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

ELEMENTary, my dear middle schoolers! Everyone knows that matter matters, but what exactly is matter made of? Students will explore the periodic table, have "pHun" with pH, and spend some serious bonding time with chemical compounds. Plus, we'll put on our mad scientist goggles for a metallic flame experiment.

## NEITHER BEATEN NOR HELPLESS: SOUTH CAROLINA AND RECONSTRUCTION

**Grades:** 3rd, 5th, 8th, and High School only

**SC Academic Standards for Social Studies:** 3.4, 5.1, 8.5, USHC-3

**Style:** Classroom program

**Maximum Capacity:** 30 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Monday - Thursday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

In this lesson, we will explore the Museum's Reconstruction exhibit, focusing on the meaning of American citizenship as it was shaped after the Civil War. Students will discuss the 13th, 14th, and 15th amendments and analyze media coverage from the time, including the work of both sketch artists and photographers. Join us as we discover how moments from our past inform not just our present, but our future, as well. Schools may be split into groups of 15.

## OZOCODE

**Grades:** 6th and 7th grade focused, available for all

**SC 2017 Computer Science and Digital Literacy Standards:** 6.AP.1.1, 6.AP.2.1, 6.AP.3.1, 6.AP.4.1, 6.AP.5.2, 6.IC.2.1, 7.CS.1.1, 7.AP.1.1, 7.AP.1.2, 7.AP.4.1

**Style:** Classroom

**Maximum Capacity:** 25 participants (10 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Thursday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

In this interactive program, students will learn about the abilities and the impact of robots. Ozobot Evo is the tiny robot with lots of possibilities. From color-coding to maze running, students will have the opportunity to explore these possibilities through hands-on discovery. We'll learn about different types of coding and teach Ozo to do some awesome tricks along the way.





## PART OF THE SOLUTION

**Grades:** High School (Chemistry I) focused, available for all

**SC 2014 Academic Standards for Science:** H.C.2, H.C.3, H.C.5, H.C.6

**Style:** Auditorium

**Maximum Capacity:** 80 students (15 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm, 1 pm

We take learning to the atomic level with an exciting and engaging presentation from our South Carolina State Museum educators! Your students will be as excited as electrons when we light salts on fire to learn about the emission spectrum. We dive right in to learn about how chemicals dissociate, disperse, and ionize. After this dynamic program, your students will know how important it is to be part of the solution.

## PICTURING HISTORY

**Grades:** 3rd, 4th, and 8th grades only

**SC Academic Standards for Social Studies:** 3.2, 3.3, 3.4, 3.5; 4.2, 4.3, 4.6; 8.1, 8.2, 8.3, 8.4

**SC Academic Standards for Visual Arts:** 3.4, 3.5; 4.4, 4.5; 8.4, 8.5

**Style:** Tour

**Maximum Capacity:** 30 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Monday - Thursday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

“Art imitates life imitates art.” In this tour, experience first-hand how artists through the ages have held a mirror up to their world and created works that not only enchant the eye, but can tell us much about their lives and our own history. Students will see South Carolina from a more creative point of view and learn how art pieces serve as historic documents. Schools may be split into groups of 15.

## REFLECTIONS ON THE RIVER **NEW**

**Grades:** 3rd, 4th, and 8th grades only

**SC 2014 Academic Standards for Science:** 3.4, 3.6, 4.4, 4.6, 5.4, 5.6, 6.4, 6.6, 7.4, 7.6, 8.4, 8.6, HS 4, HS 6

**Style:** Tour

**Maximum Capacity:** 30 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Monday - Thursday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

This tour explores works in the Lipscomb Gallery and the significance of South Carolina rivers in culture, industry, and landscape, as well as the ways in which they have inspired artists in the state. A brand new program, it links cultural history and art to the world around us (available until March 2020).

## SPHERO: DISCOVERING PHYSICS THROUGH ROBOTICS **NEW**

**Grades:** 8th grade focused, available for all

**Style:** Classroom

**Maximum Capacity:** 25 participants (10 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

Ever seen a robot try to bowl? Now you can! In this hands-on physics program, we will use our little blue robot named Dash to learn the ins and outs of position, direction, and speed as we try to knock over all the pins in our own bowling alley. Which forces are helping us, and which ones are hurting us? Will the mass of our bowling ball help or hurt? Let's find out together as we go bowling for science.





## STATE MUSEUM HIGHLIGHTS TOUR

**Grades:** All grades

**Style:** Tour

**Maximum Capacity:** 80 students (15 minimum)

**Duration:** 45 minutes

**Days:** Sept.-Feb.: Monday - Friday; March-May: Monday - Wednesday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

This tour is a great introduction to the State Museum and highlights some of our most intriguing exhibits. Docents guide students through museum galleries presenting South Carolina's natural history, cultural history, science, technology and art. Schools will be asked to break students into small groups of 10.

## TALKING TAXONOMY

**Grades:** 6th grade and High School (Biology I) focused, available for all

**SC 2014 Academic Standards for Science:** 6.L.4, 6.L.5; H.B.2

**Style:** Auditorium

**Maximum Capacity:** 80 participants (15 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

Life: What is it? Why is it important? We'll answer these questions and more during this organismal exploration. We will explore the pros and cons of cells with a "molecular" building-block competition, learn about metabolism with a search for carbon, and have a pop quiz on the various types of reproduction. Finally, we'll make our way down the taxonomic ladder and find out how different (or similar) we are to various living organisms on our quest for a binomial identity. After this program, your students won't stop talking taxonomy.

## TRANSFERRING ENERGY

**Grades:** 6th grade focused, available for all

**SC 2014 Academic Standards for Science:** 6.S.1, 6.P.3

**Style:** Classroom

**Maximum Capacity:** 25 participants (10 minimum)

**Duration:** 30-45 minutes

**Days:** Tuesdays through Fridays

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

Energy is a measure of the ability to do work, and your students' brains will certainly get a workout during this electrifying energy program! Join us for a series of exciting experiments in which your students will warm up with thermal energy, light up with radiant energy, explode with chemical energy, keep it moving with mechanical energy, and be shocked by how much fun they are having. For the grand finale, they will put all their new knowledge to test as they transfer energy to win the Cubelet robotic challenge.

## VIRTUAL REALITY CONTENT OPTIONS

The State Museum's Oculus Go headsets are only to be used by students 13 years of age or older. Virtual Reality content is constantly updating. Please see our webpage for our most up-to-date offerings.

### VIRTUAL REALITY: ANNE FRANK HOUSE VR **NEW**

**Grades:** 7th grade and up ONLY.

**Standards topic focus:** History

**Style:** Classroom

**Maximum Capacity:** 25 participants (10 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm, 1 pm + later time by request)

The award winning Anne Frank House Virtual Reality (VR) offers a unique and emotional insight into the more than two years Anne Frank, her family, and 4 others would live in the "Secret Annex" of an old office building in Amsterdam. Together, they shared the burden of living in hiding in confined quarters with the constant threat of discovery. Immerse yourself in Anne's thoughts as you traverse each faithfully recreated room, thanks to the power of VR, and find out what happened to the Annex' brave inhabitants.

### VIRTUAL REALITY: THE BODY VR **NEW**

**Grades:** 7th grade and up ONLY.

**Standards topic focus:** Biology

**Style:** Classroom

**Maximum Capacity:** 25 participants (10 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm, 1 pm + later time by request)

The Body Virtual Reality (VR) is an educational virtual reality experience that takes the user inside the human body. Travel through the bloodstream and discover how blood cells work to spread oxygen throughout the body. Enter one of the billions of living cells inside our body and learn how the organelles work together to fight deadly viruses.

### VIRTUAL REALITY: WONDERFUL YOU **NEW**

**Grades:** 7th grade and up ONLY.

**Standards topic focus:** Biology

**Style:** Classroom

**Maximum Capacity:** 25 participants (10 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 a.m., 10:30 a.m., 12 p.m., and 1 p.m. + later times by request

Academy award nominee Samantha Morton presents an interactive virtual reality experience, immersed inside the womb. Wonderful You uses the latest scientific research to reveal remarkable stories from the development of your senses; Touch, Taste, Smell, Hear, and Sight. Meet your unborn self: tickle your feet, play sounds in the womb, and release odors into the amniotic fluid.







## High School Programs



SOUTH CAROLINA STATE MUSEUM

## COSMIC FINGERPRINTS

**Grades:** 8th grade and high school only

**SC 2014 Academic Standards for Science:** 8.S.1, 8.P.3, 8.E.4, H.E.1, H.E.2

**Style:** Boeing Observatory Classroom

**Maximum Capacity:** 50 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Tuesdays and Thursdays Only

**Times:** 9:30 am, 10:30 am, 1 pm

How do astronomers know what stars and galaxies are made of? In this two-part program, students will learn how astronomers unlock the mysteries of the universe using the field of spectroscopy - the splitting of light from celestial objects into its component colors. Safe solar observing (weather permitting) in the museum's Boeing Observatory is included in this experience.

## NEITHER BEATEN NOR HELPLESS: SOUTH CAROLINA AND RECONSTRUCTION

**Grades:** 3rd, 5th, 8th, and High School only

**SC Academic Standards for Social Studies:** 3.4, 5.1, 8.5, USHC-3

**Style:** Classroom

**Maximum Capacity:** 30 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Mondays - Thursday

**Times:** 9:30 am, 10:30 am, 12 pm, 1 pm

In this lesson, we will explore the Museum's Reconstruction exhibit, focusing on the meaning of American citizenship as it was shaped after the Civil War. Students will discuss the 13th, 14th, and 15th amendments and analyze media coverage from the time, including the work of both sketch artists and photographers. Join us as we discover how moments from our past inform not just our present, but our future, as well. Schools may be split into groups of 15.

## PART OF THE SOLUTION

**Grades:** High School (Chemistry I) focused, available for all

**SC 2014 Academic Standards for Science:** H.C.2, H.C.3, H.C.5, H.C.6

**Style:** Auditorium

**Maximum Capacity:** 80 students (15 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm, 1 pm

We take learning to the atomic level with an exciting and engaging presentation from our South Carolina State Museum educators! Your students will be as excited as electrons when we light salts on fire to learn about the emission spectrum. We dive right in to learn about how chemicals dissociate, disperse, and ionize. After this dynamic program, your students will know how important it is to be part of the solution.

## REFLECTIONS ON THE RIVER **NEW**

**Grades:** 3rd, 4th, and 8th grades only

**SC Academic Standards for Social Studies:** 3.4, 3.6, 4.4, 4.6, 5.4, 5.6, 6.4, 6.6, 7.4, 7.6, 8.4, 8.6, HS 4, HS 6

**SC Academic Standards for Visual Arts:** 3.1, 3.5, 4.1, 5.3, 8.1, 8.5, USHC-4

**Style:** Tour

**Maximum Capacity:** 30 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Monday - Thursday

**Times:** 9:30 a.m., 10:30 a.m., 12 p.m., and 1 p.m.

This tour explores works in the Lipscomb Gallery and the significance of South Carolina rivers in culture, industry, and landscape, as well as the ways in which they have inspired artists in the state. A brand new program, it links cultural history and art to the world around us (available until March 2020).









## STATE MUSEUM HIGHLIGHTS TOUR

**Grades:** All grades

**Style:** Tour

**Maximum Capacity:** 100 participants (10 minimum)

**Duration:** 45 minutes

**Days:** Sept.-Feb.: Monday - Friday; March-May: Monday - Wednesday

**Times:** 9:30 am, 10:30 am, 12 pm, 1 pm

This tour is a great introduction to the State Museum and highlights some of our most intriguing exhibits. Docents guide students through museum galleries presenting South Carolina's natural history, cultural history, science, technology and art. Schools will be asked to break students into small groups of 10.

## TALKING TAXONOMY

**Grades:** 6th grade and High School (Biology I) focused, available for all

**SC 2014 Academic Standards for Science:** 6.L.4, 6.L.5; H.B.2

**Style:** Auditorium

**Maximum Capacity:** 80 participants (15 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm and 1 pm

Life: What is it? Why is it important? We'll answer these questions and more during this organismal exploration. We will explore the pros and cons of cells with a "molecular" building-block competition, learn about metabolism with a search for carbon, and have a pop quiz on the various types of reproduction. Finally, we'll make our way down the taxonomic ladder and find out how different (or similar) we are to various living organisms on our quest for a binomial identity. After this program, your students won't stop talking taxonomy.

## VIRTUAL REALITY CONTENT OPTIONS

The State Museum's Oculus Go headsets are only to be used by students 13 years of age or older.

### VIRTUAL REALITY: ANNE FRANK HOUSE VR **NEW**

**Grades:** 7th grade and up ONLY.

**Standards topic focus:** History

**Style:** Classroom

**Maximum Capacity:** 25 participants (10 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm, 1 pm + later time by request)

The award winning Anne Frank House Virtual Reality (VR) offers a unique and emotional insight into the more than two years Anne Frank, her family, and 4 others would live in the "Secret Annex" of an old office building in Amsterdam. Together, they shared the burden of living in hiding in confined quarters with the constant threat of discovery. Immerse yourself in Anne's thoughts as you traverse each faithfully recreated room, thanks to the power of VR, and find out what happened to the Annex' brave inhabitants.

### VIRTUAL REALITY: THE BIG TABLE **NEW**

**Grades:** 7th grade and up ONLY.

**Standards topic focus:** Chemistry

**Style:** Classroom

**Maximum Capacity:** 25 participants (10 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm, 1 pm + later time by request)

Sci-fi adventure or educational experience? Why not both? The Big Table is a fast-paced, quirky virtual laboratory where users can interact with an array of advanced machinery and loveable robotic creations. In their quest to restore power to their ship, users will also learn all about the periodic table, sub atomic particles, and elemental properties.

## **VIRTUAL REALITY: THE BODY VR** **NEW**

**Grades:** 7th grade and up ONLY.

**Standards topic focus:** Biology

**Style:** Classroom

**Maximum Capacity:** 25 participants (10 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 am, 10:30 am, 12 pm, 1 pm + later time by request)

The Body Virtual Reality (VR) is an educational virtual reality experience that takes the user inside the human body. Travel through the bloodstream and discover how blood cells work to spread oxygen throughout the body. Enter one of the billions of living cells inside our body and learn how the organelles work together to fight deadly viruses.

## **VIRTUAL REALITY: DAVID ATTENBOROUGH'S FIRST LIFE VR** **NEW**

**Grades:** 7th grade and up ONLY.

**Standards topic focus:** Biology

**Style:** Classroom

**Maximum Capacity:** 25 participants (10 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 a.m., 10:30 a.m., 12 p.m., and 1 p.m. + later times by request

David Attenborough's First Life Virtual Reality (VR) is an award-winning fully immersive virtual reality experience. Using top paleontological research and state of the art computer technology, long-extinct animals such as the five-eyed Opabinia, the fearsome looking Anomalocaris and the spiny, worm-like Hallucigenia are brought vividly to life in this 360 CGI VR experience.



## **VIRTUAL REALITY: MEL CHEMISTRY VR LESSONS** **NEW**

**Grades:** 7th grade and up ONLY.

**Standards topic focus:** Chemistry

**Style:** Classroom

**Maximum Capacity:** 25 participants (10 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 a.m., 10:30 a.m., 12 p.m., and 1 p.m. + later times by request

MEL Chemistry is a course of chemistry lessons in virtual reality, made to fit the school curriculum, where virtual reality turns studying into an entertaining process for learning about the rudiments of chemistry, using scientific games and the immersion method. Dive into solids and gases to learn about their structure on the atomic and molecular level. Construct any atom on your own with a special constructor and learn about electron configuration.

## **VIRTUAL REALITY: NUCLEAR: THE PERIODIC TABLE OF ELEMENTS** **NEW**

**Grades:** 7th grade and up ONLY.

**Standards topic focus:** Chemistry

**Style:** Classroom

**Maximum Capacity:** 25 participants (10 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 a.m., 10:30 a.m., 12 p.m., and 1 p.m. + later times by request

This experience is more self-guided than other virtual reality experiences and a little tougher. Nuclear is a high-tech educational application that dynamically models an interactive atom in a beautiful and intuitive way. In Nuclear, you get to build all of the elements of the periodic table via a simple mechanic of adding and subtracting the atomic building blocks of neutrons, protons, and electrons. The goal of the app is to let you learn about each of the elements of the periodic table by constructing a stable version of that element. Once a stable element has been created, it is unlocked in the periodic table. Can you create and unlock them all?

## **VIRTUAL REALITY: WONDERFUL YOU** **NEW**

**Grades:** 7th grade and up ONLY.

**Standards topic focus:** Biology

**Style:** Classroom

**Maximum Capacity:** 25 participants (10 minimum)

**Duration:** 30-45 minutes

**Days:** Monday - Friday

**Times:** 9:30 a.m., 10:30 a.m., 12 p.m., and 1 p.m. + later times by request

Academy award nominee Samantha Morton presents an interactive virtual reality experience, immersed inside the womb. Wonderful You uses the latest scientific research to reveal remarkable stories from the development of your senses; Touch, Taste, Smell, Hear, and Sight. Meet your unborn self: tickle your feet, play sounds in the womb, and release odors into the amniotic fluid.







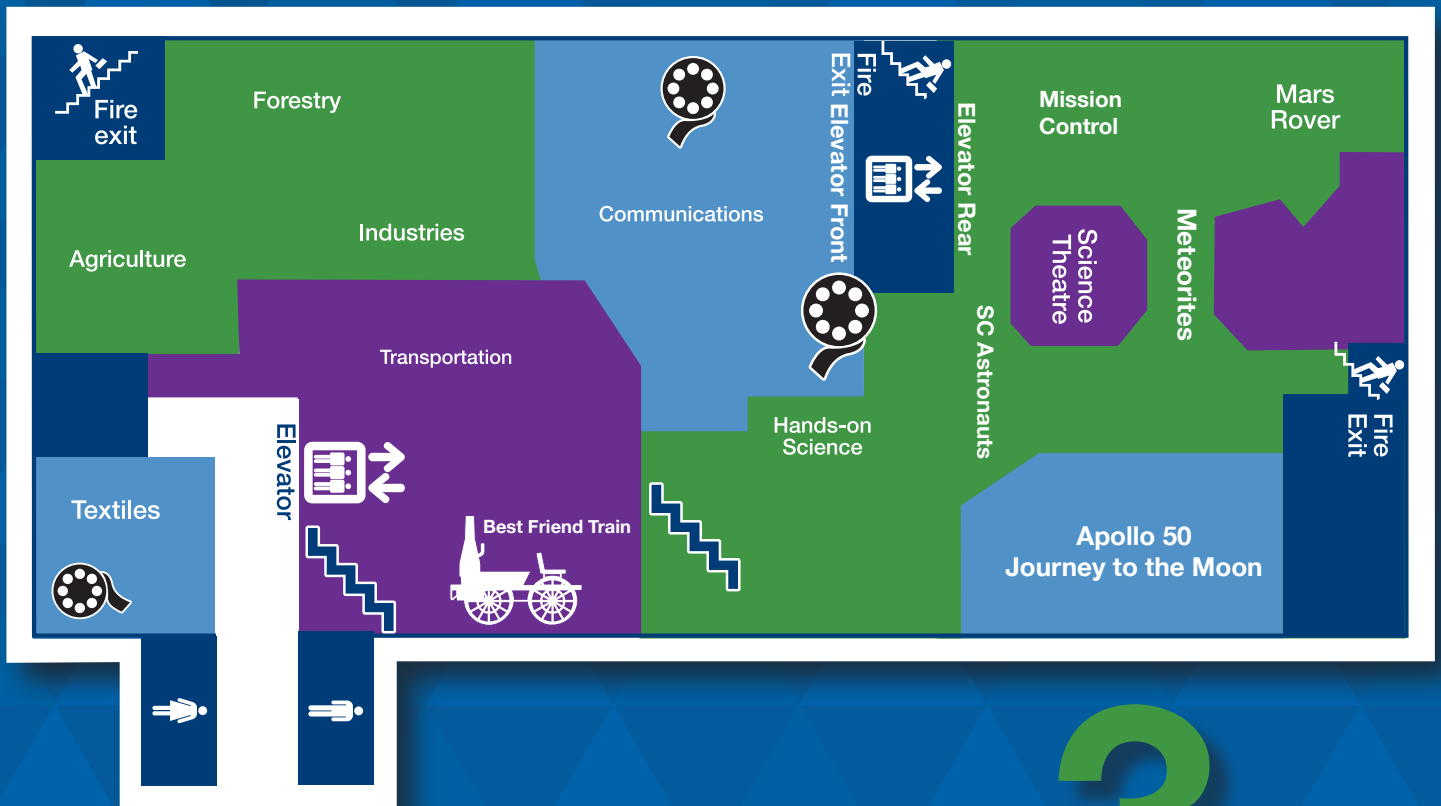
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